CAUTIONS

1、 Please read this service manual carefully and make sure all elements of anti-static are in place before the repair work is carried out.

2、 Servicing and alignment **MUST** be undertaken by qualified personnel only.

3、 Please use specified tools and equipments for servicing, in which the parameters need to be calibrated with specified criteria.

Content

1. Brief Introduction……3

2. Flashing Procedure……4 ~ 9

3. FAQ……10 ~ 11

Chapter 1 Specification

Features & Functions

- Dual SIM Dual Standby Single working
- Full touch
- FM
- Multi-Media application
- 0.3MP with sw upgarde to 1.3MP
- T-Flash（Support 8G T Card）
- 3.5“ HVGA 320*480
- MP3、MP4、AVI 、3GP
- USB1.1，Mini USB

Specification :

Network: 850/900/1800/1900MHz
Display: 3.5“ HVGA 320*480
Camera: VGA(1.3M by Software)
BT: 3.0
Memory: 64M+128M
Lithium Battery: Standard (1050mAh)
USB Data cable: USB 1.1

Chapter 2: Flashing Procedure

9.1 Firmware Upgrading

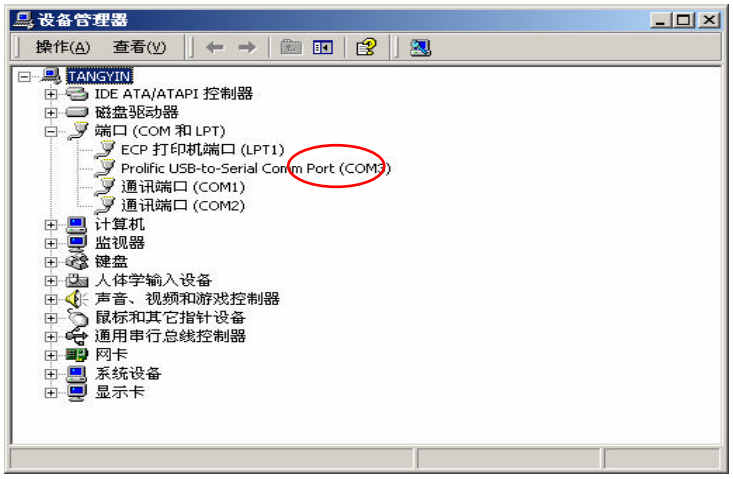
9.1.1 Install USB driver

The maximum downloading speed can be up to 921600bit/s when using USB-Serial cable.

The driver needs to be installed before using the USB cable.

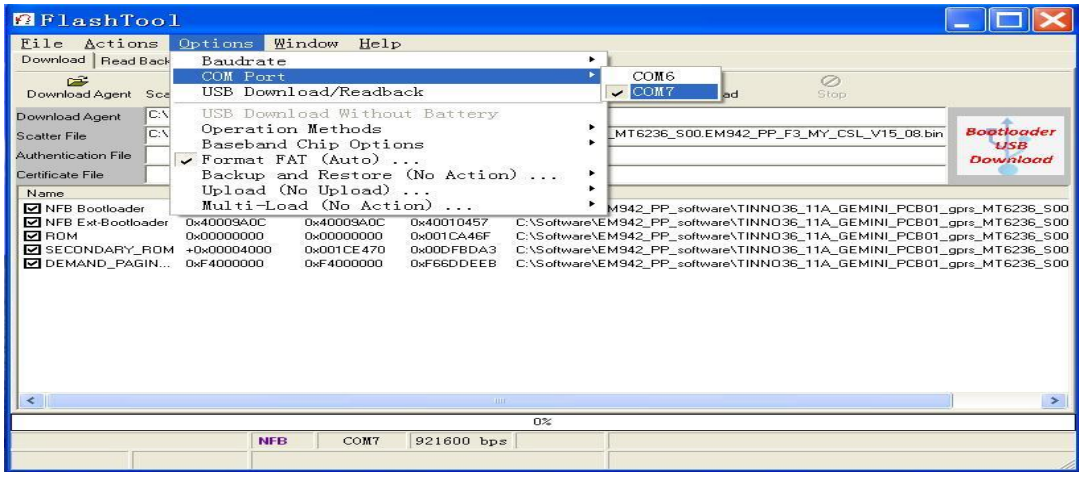
Please keeps the USB cable unplugged when installing the driver.

Plug the USB cable when installing is completed. And check device manager of the PC.

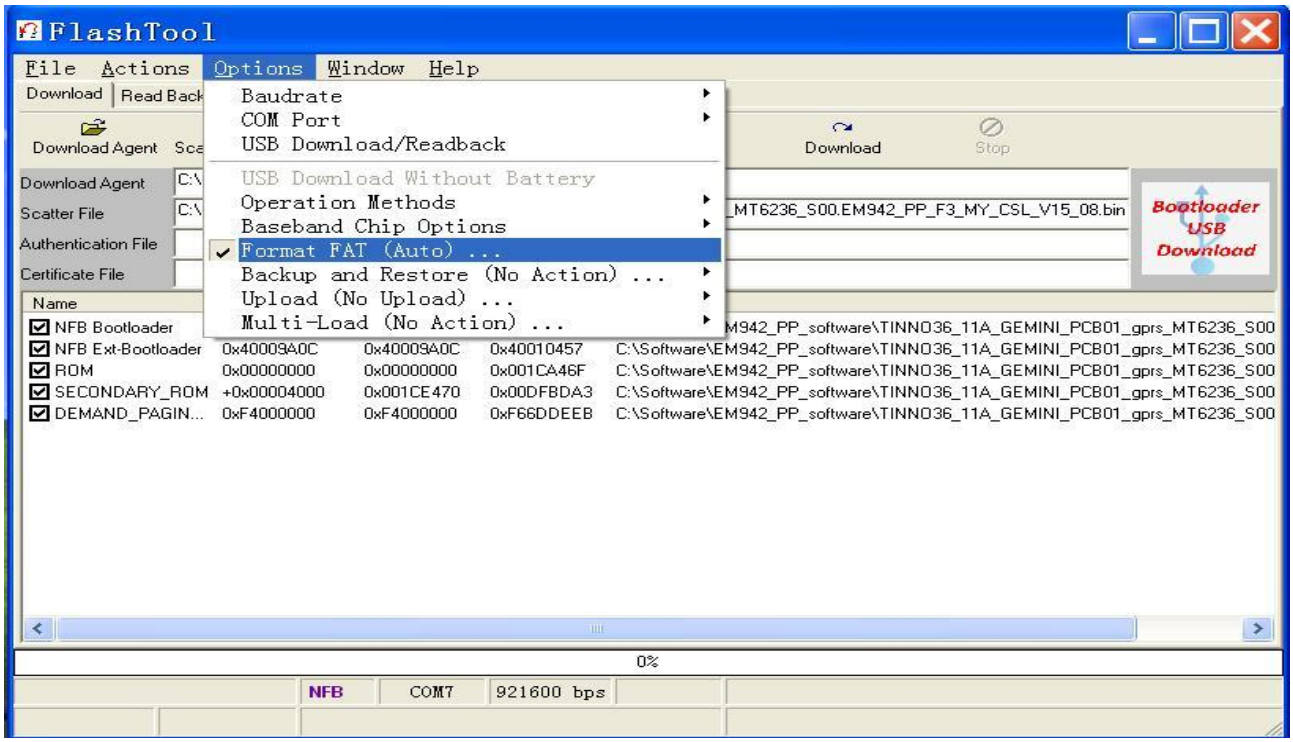


9.1.2 Run the “Flash_tool.exe” of FlashTool_v5.1112.00

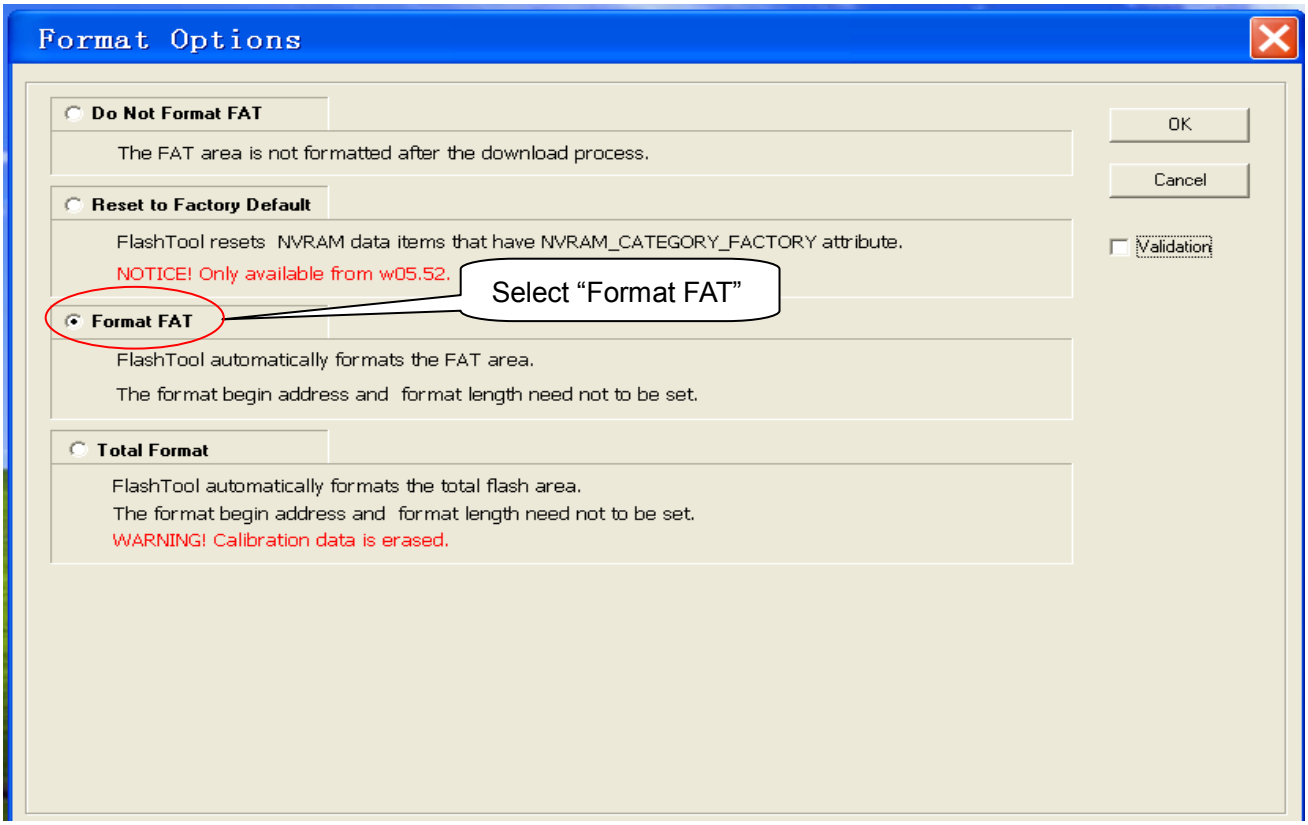
9.1.3 Please select “Options”-“COM port”-Choose the port which is same as the one in “Device Manager”.



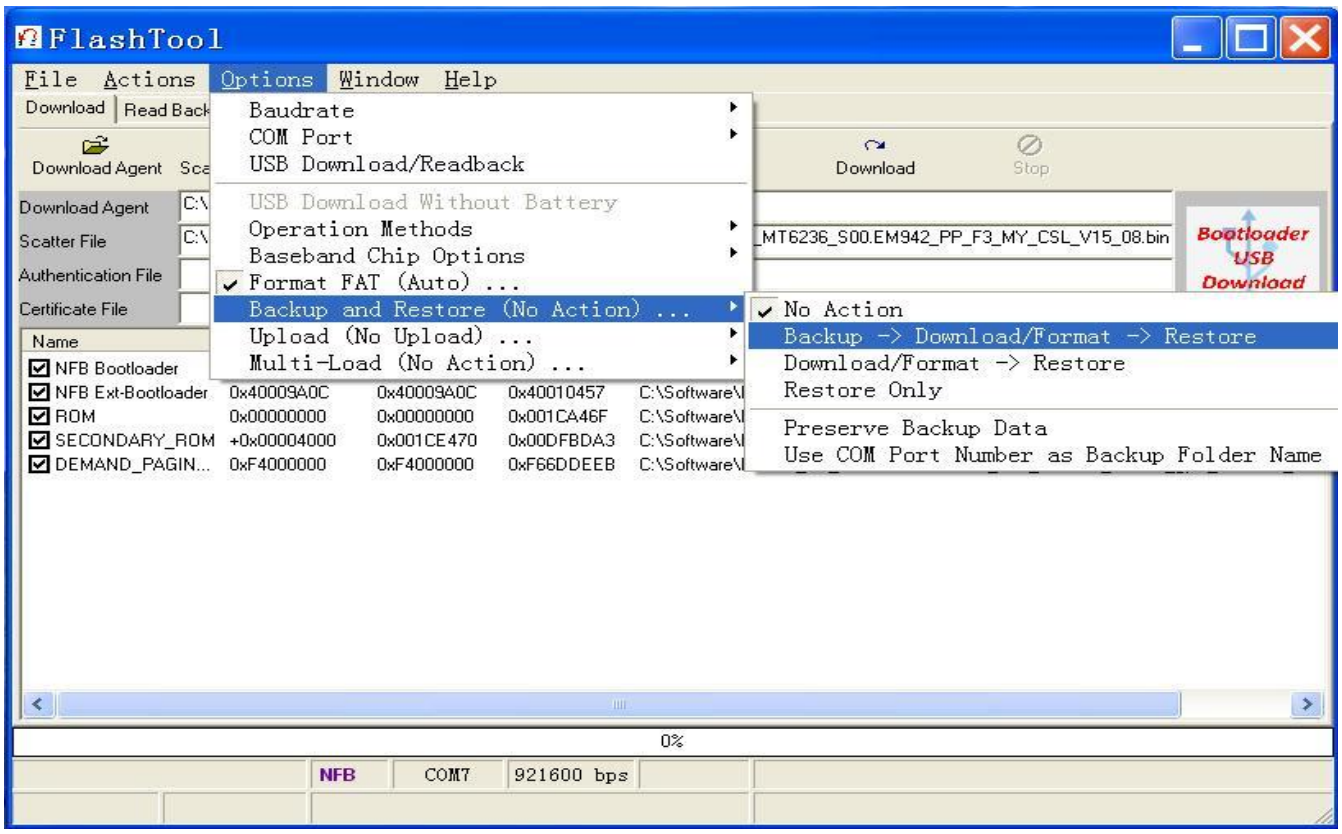
9.1.4 Select “Options”-“Format FAT (DISABLED)…” and please do NOT select “validation”.



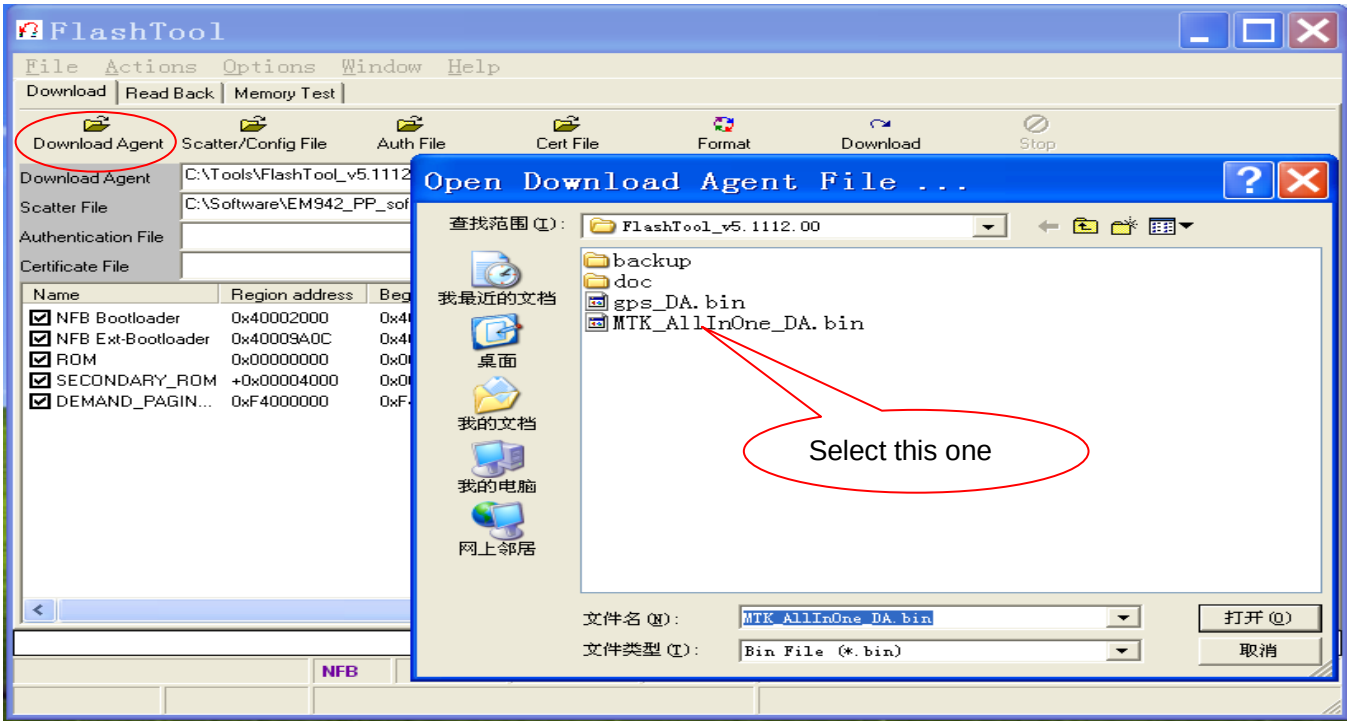
9.1.5 Please select “Format FAT”.


Format Options
Do Not Format FAT
The FAT area is not formatted after the download process.
Reset to Factory Default
FlashTool resets NVRAM data items that have NVRAM_CATEGORY_FACTORY attribute.
NOTICE! Only available from w05.52.
Format FAT
FlashTool automatically formats the FAT area.
The format begin address and format length need not to be set.
Total Format
FlashTool automatically formats the total flash area.
The format begin address and format length need not to be set.
WARNING! Calibration data is erased.
OK
Cancel
Validation
Select “Format FAT”

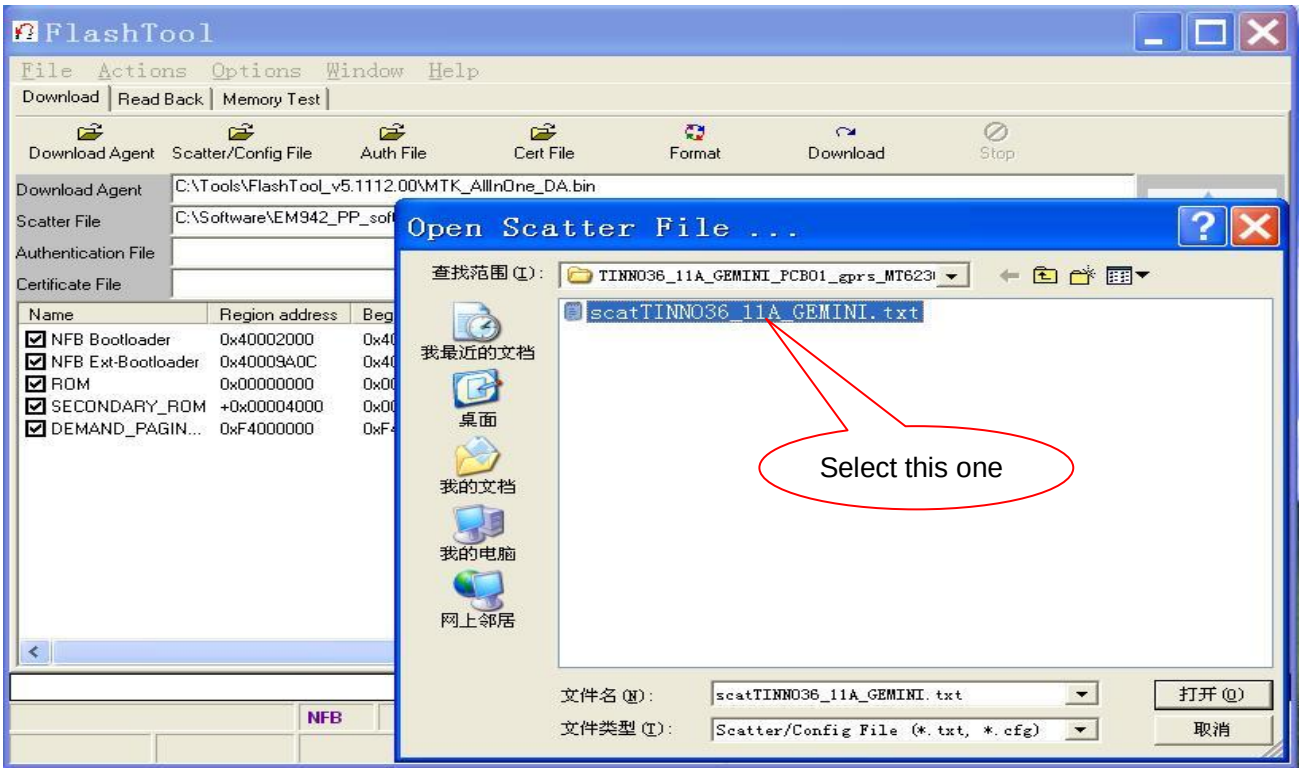
9.1.6 Select “Options”- “Backup and Restore”, then select the “Backup -> Download/format -> Restore”.



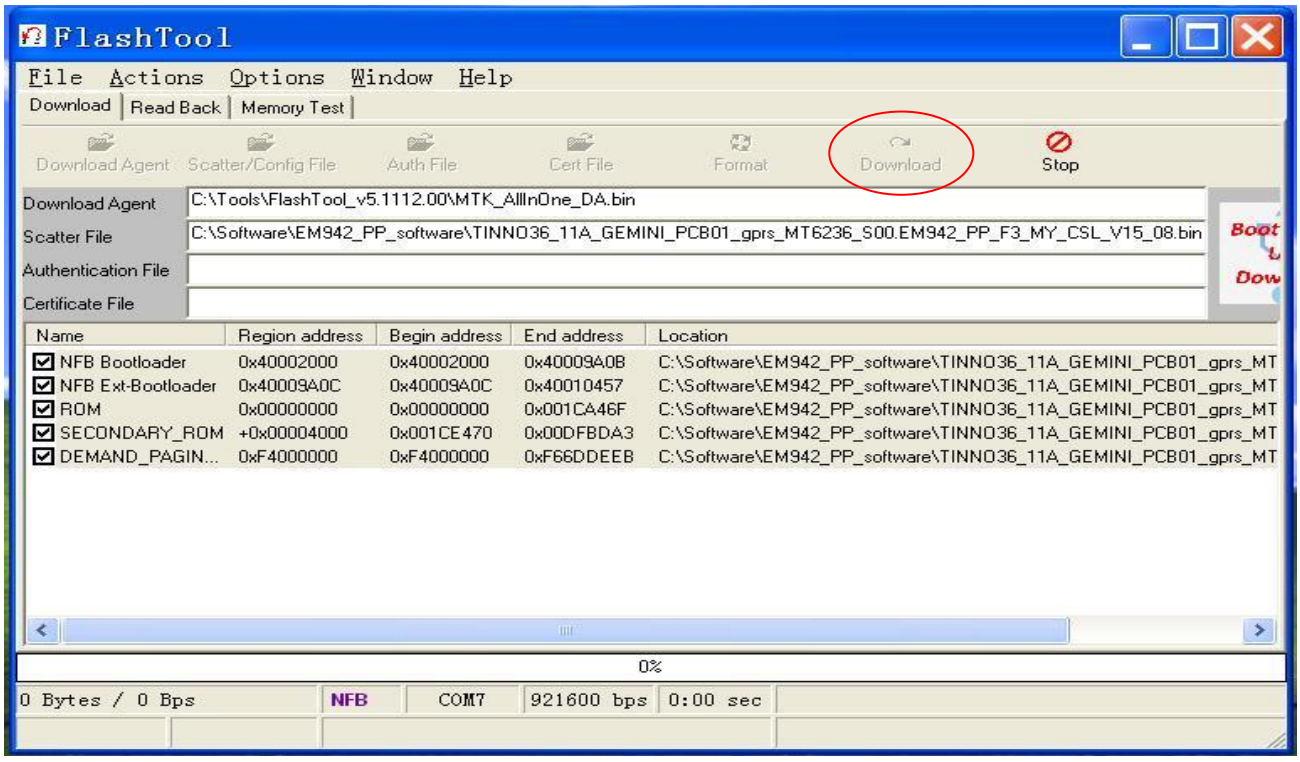
9.1.7 Click the”Download Agent” and select the file “MTK-ALLInOne-DA.bin”.



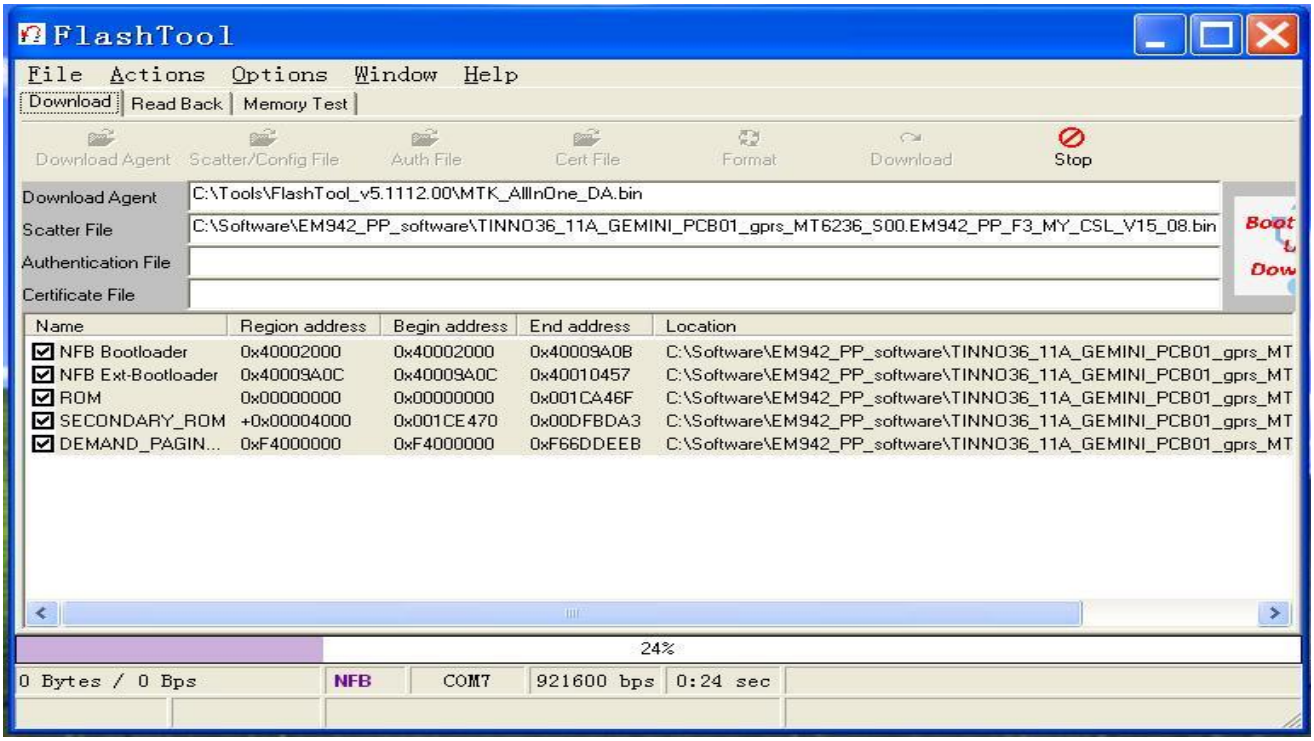
9.1.8 Click the “Scatter/config file” and select the “scatTINNO36_11A_GEMINI.txt”.



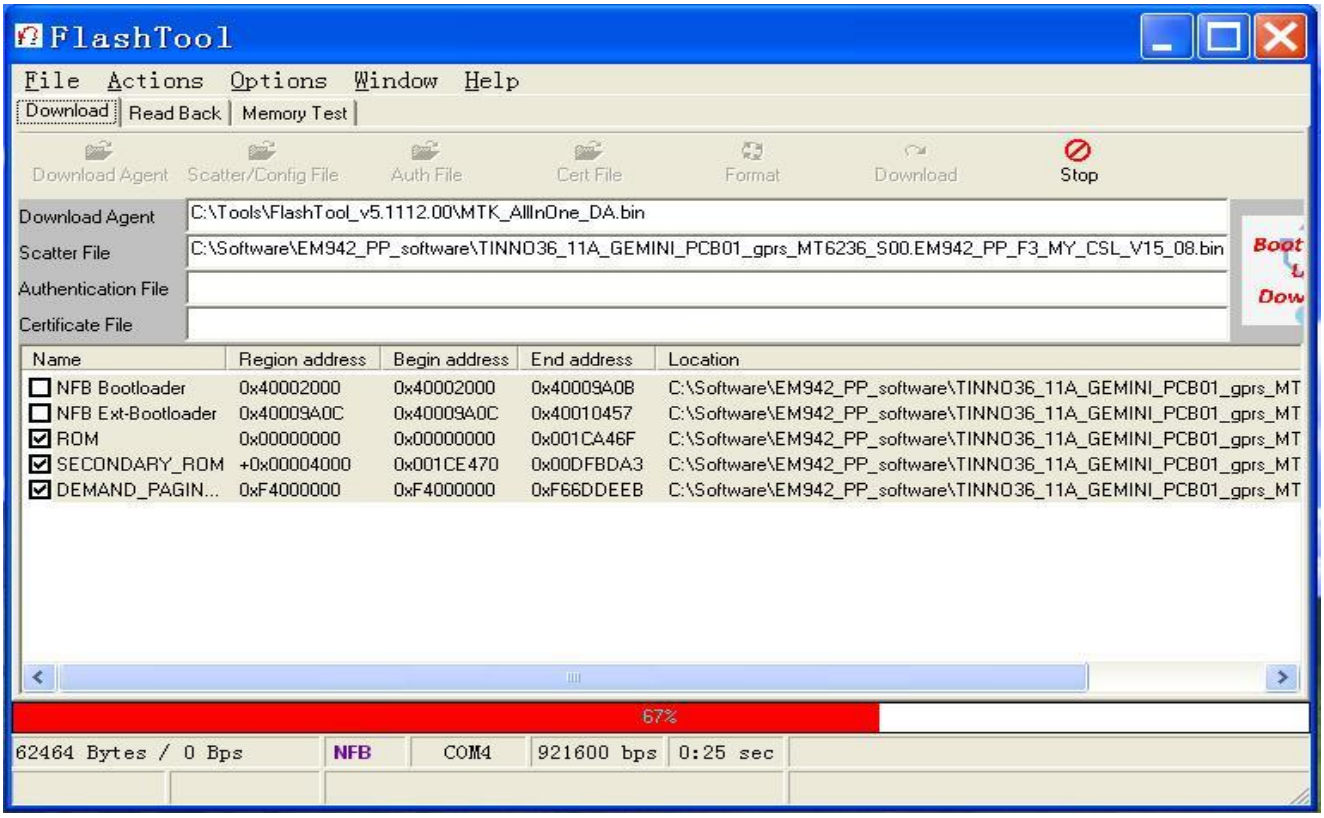
9.1.9 Power off the handset, remove the battery, click “Download”, and connect the cable with handset, then insert the battery, press the power on button, the gray, red, blue, green and gray progress bar shall appear. Then upgrade would be completed when appear “OK”.



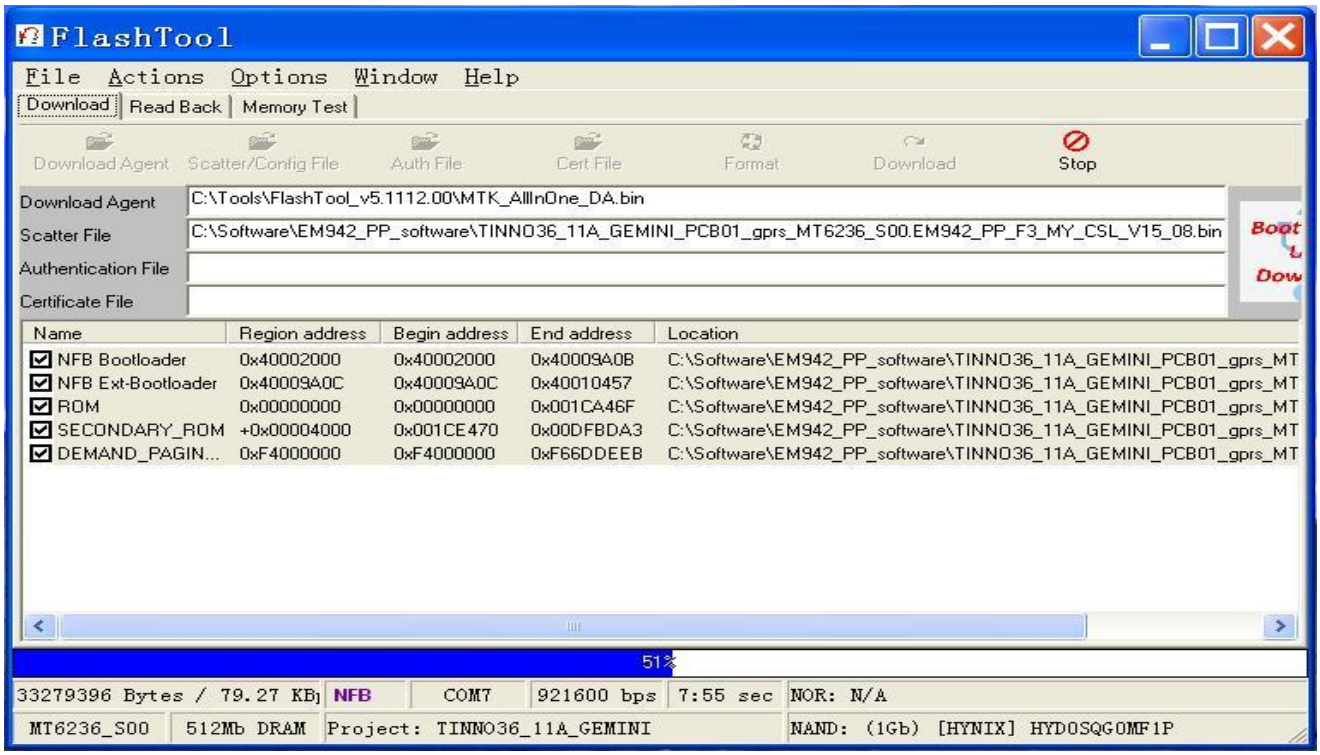
9.1.10 Backup the data. (gray progress bar)


FlashTool
File Actions Options Window Help
Download Read Back Memory Test
Download Agent Scatter/Config File Auth File Cert File Format Download Stop
Download Agent C:\Tools\FlashTool_v5.1112.00\MTK_AllInOne_DA.bin
Scatter File C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT6236_S00.EM942_PP_F3_MY_CSL_V15_08.bin
Authentication File
Certificate File
Name Region address Begin address End address Location
NFB Bootloader 0x40002000 0x40002000 0x40009A0B C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
NFB Ext-Bootloader 0x40009A0C 0x40009A0C 0x40010457 C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
ROM 0x00000000 0x00000000 0x001CA46F C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
SECONDARY_ROM +0x00004000 0x001CE470 0x00DFBDA3 C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
DEMAND_PAGIN... 0xF4000000 0xF4000000 0xF66DDEEB C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
24%
0 Bytes / 0 Bps NFB COM7 921600 bps 0:24 sec

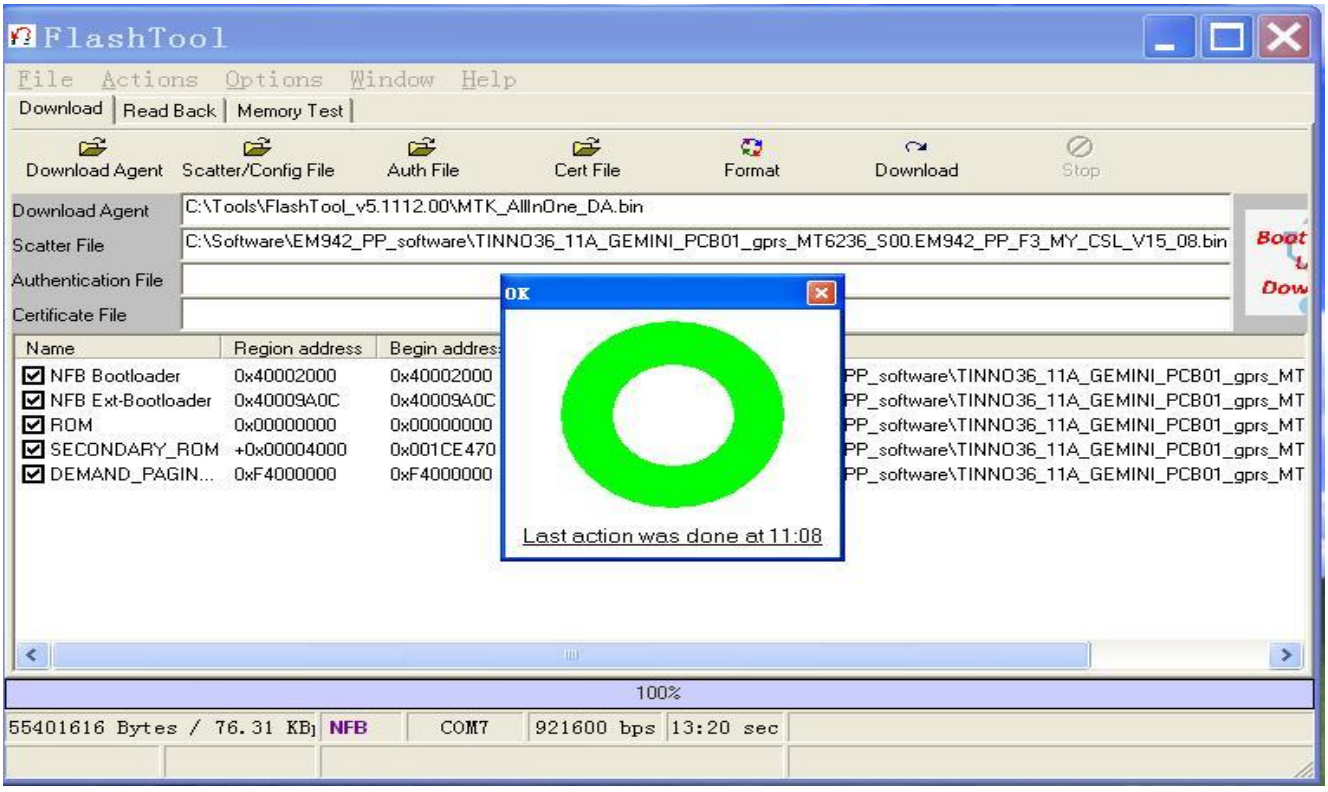
9.1.11 Connect to phone. (red progress bar)


FlashTool
File Actions Options Window Help
Download Read Back Memory Test
Download Agent Scatter/Config File Auth File Cert File Format Download Stop
Download Agent C:\Tools\FlashTool_v5.1112.00\MTK_AllInOne_DA.bin
Scatter File C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT6236_S00.EM942_PP_F3_MY_CSL_V15_08.bin
Authentication File
Certificate File
Name Region address Begin address End address Location
NFB Bootloader 0x40002000 0x40002000 0x40009A0B C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
NFB Ext-Bootloader 0x40009A0C 0x40009A0C 0x40010457 C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
ROM 0x00000000 0x00000000 0x001CA46F C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
SECONDARY_ROM +0x00004000 0x001CE470 0x00DFBDA3 C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
DEMAND_PAGIN... 0xF4000000 0xF4000000 0xF66DDEEB C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
67%
62464 Bytes / 0 Bps NFB COM4 921600 bps 0:25 sec

9.1.12 Downloading is in process. (blue progress bar)


FlashTool
File Actions Options Window Help
Download Read Back Memory Test
Download Agent Scatter/Config File Auth File Cert File Format Download Stop
Download Agent C:\Tools\FlashTool_v5.1112.00\MTK_AllInOne_DA.bin
Scatter File C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT6236_S00.EM942_PP_F3_MY_CSL_V15_08.bin
Authentication File
Certificate File
Name Region address Begin address End address Location
NFB Bootloader 0x40002000 0x40002000 0x40009A0B C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
NFB Ext-Bootloader 0x40009A0C 0x40009A0C 0x40010457 C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
ROM 0x00000000 0x00000000 0x001CA46F C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
SECONDARY_ROM +0x00004000 0x001CE470 0x00DFBDA3 C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
DEMAND_PAGIN... 0xF4000000 0xF4000000 0xF66DDEEB C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT
51%
33279396 Bytes / 79.27 KB/ NFB COM7 921600 bps 7:55 sec NOR: N/A
MT6236_S00 512Mb DRAM Project: TINNO36_11A_GEMINI NAND: (1Gb) [HYNIX] HYD0SQG0MF1P

9.1.13 Downloading is completed.


FlashTool
File Actions Options Window Help
Download Read Back Memory Test
Download Agent Scatter/Config File Auth File Cert File Format Download Stop
Download Agent C:\Tools\FlashTool_v5.1112.00\MTK_AllInOne_DA.bin
Scatter File C:\Software\EM942_PP_software\TINNO36_11A_GEMINI_PCB01_gprs_MT6236_S00.EM942_PP_F3_MY_CSL_V15_08.bin
Authentication File
Certificate File
OK
Last action was done at 11:08
100%
55401616 Bytes / 76.31 KB/ NFB COM7 921600 bps 13:20 sec

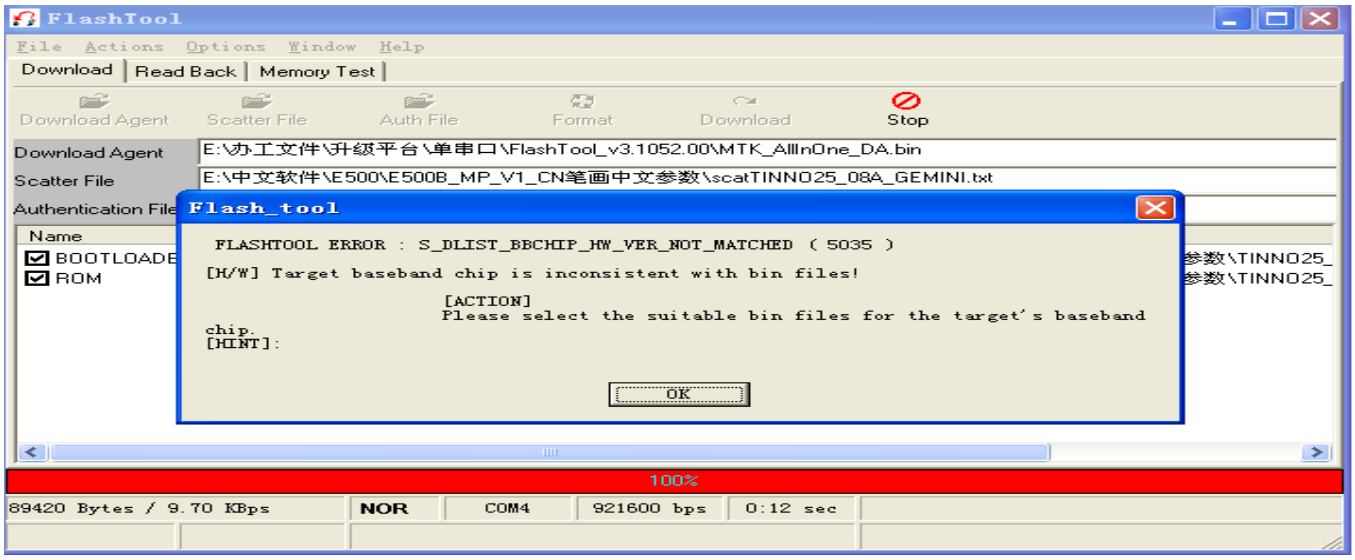
9.1.14 Power on phone and input "*#84666*#", select "one key Restore", phone will be reboot, then the user's setting could be eliminated entirely.

Chapter 3 : FAQ

1. Description: can't power on (also upgrade software fail)

Root cause: Red scroll 100% run completely when upgrade software, the detail as figure 1, also it prove power supply, clock is normal and defective typical issue is focus on CPU or FLASH poor soldering or damage, and maybe software do not fit for hardware.

Corrective action: check software fit for hardware whether or not, resolding CPU and FLASH or exchange new CPU and FLASH.



1(figure 1)

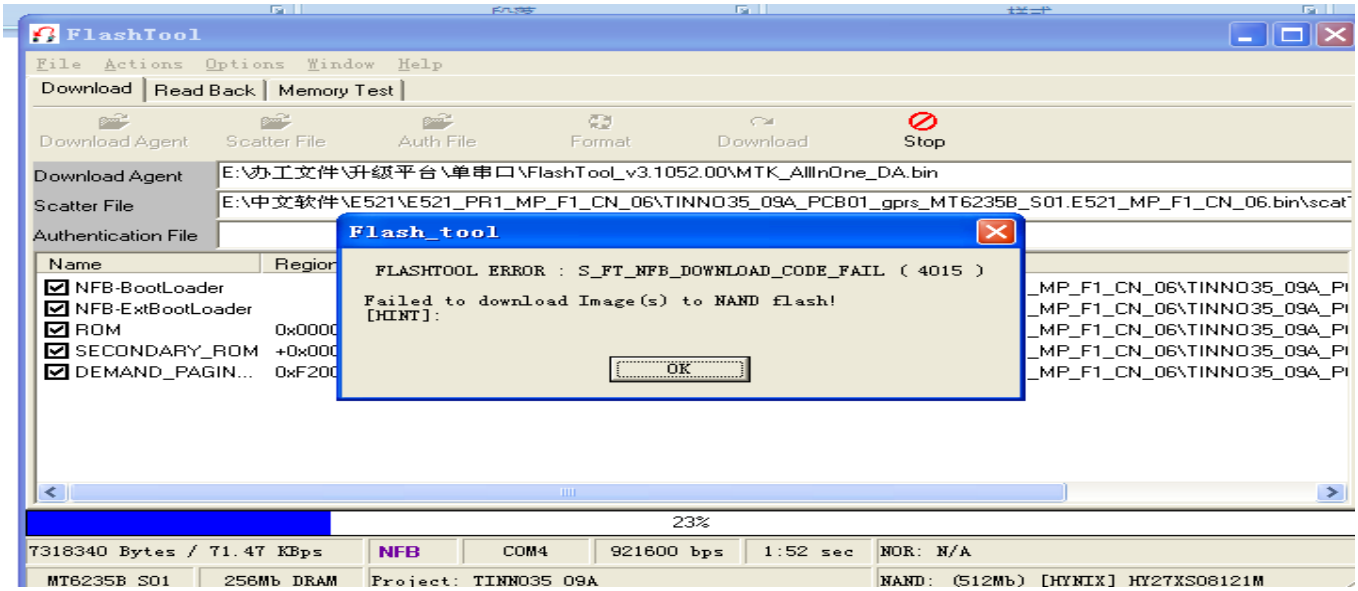
2. Description: Can't power on (handset is dead when upgrade software.)Details as figure 2.

Root cause:

The power supply and clock both work on as common during upgrade software.

The typical defective issue as poor soldering or go to fall, other way as exchange CPU or Flash.

Corrective action: Re-solder CPU and Flash, or replace them.



Thanks

For any query or suggestion please write to tech.help@micromaxinfo.com